

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-4, 6-9 and 11-17 are now present in this application. Claims 1, 4, 7, 8, 11, 13, 14, 15 and 17 are independent.

Amendments have been made to the Abstract of the Disclosure. Claims 1, 3, 4, 6, 7, 8, 11-15 and 17 have been amended. Claims 5 and 10 have been canceled. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C. § 119

Applicant thanks the Examiner for acknowledging Applicant's claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document.

Objection to the Abstract of the Disclosure

The Examiner has objected to the Abstract of the Disclosure because of the use of legal phraseology.

In order to overcome this objection, Applicant has amended the Abstract of the Disclosure to delete the legal phraseology and to place it in more idiomatic English. Accordingly, reconsideration and withdrawal of this objection are respectfully requested.

Claim Objections

The Examiner has objected to claims 6, 12 and 13 because of several informalities. In order to overcome this objection, Applicant has amended claims 6, 12 and 13 in order to correct the deficiencies pointed out by the Examiner. Reconsideration and withdrawal of this objection are respectfully requested.

Rejection Under 35 U.S.C. §102

Claims 1, 2, 5 and 6 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,416,379 to Inoue et al. ("Inoue"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443,

1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). This burden can be satisfied when the PTO presents evidence, by means of some teaching, suggestion or inference either in the applied prior art or generally available knowledge, that would have appeared to have suggested the claimed subject matter to a person of ordinary skill in the art or would have motivated a person of ordinary skill in the art to combine the applied references in the proposed manner to arrive at the claimed invention. See Carella v. Starlight Archery Pro Line Co., 804 F.2d 135, 140, 231 USPQ 644, 647 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); In re Rinehart, 531 F.2d 1048, 1051-1052, 189 USPQ 143, 147 (CCPA 1976).

If the PTO fails to meet this burden, then the applicant is entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability. Patentability is then determined on the entirety of the record, by a preponderance of evidence and weight of argument, *Id.*

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44

USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the examiner, inherence may not be established by probabilities or possibilities. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Initially, Applicant notes that claim 1 has been amended to incorporate the subject matter of claim 5, and claim 5 has been canceled.

The Office Action relies on Fig. 4 of Inoue, which refers to the shadow mask curvature, and on col. 9, lines 34-40 which disclose that both the inner surface of the effective area of the panel and the effective surface of the mask body should be shaped as disclosed.

Applicant respectfully traverses this rejection with respect to amended claim 1, which corresponds to canceled (original) claim 5. Claim 1, as amended, recites that the upper limit of the ratio of R_{xe} to R_{xc} is 0.5.

Applicant respectfully submits that an inspection of Fig. 4 of Inoue, which forms the basis of the rejection, clearly shows that that R_{xc} varies from 1000 to 2000, while the value of R_{xe} (at broken line 39, which indicates the end of the effective surface with respect to the horizontal axis – see the sentence bridging cols. 7 and 8) is about 1100. Thus, Inoue discloses that the ratio of R_{xe} to R_{xc}

varies between 1100/2000 and 1100/1000, or from 0.55 to 1.1. This range is clearly outside of the claimed range of from 0.3 to 0.5.

Accordingly, Inoue does not anticipate claims 1, 2, 5 and 6.

Reconsideration and withdrawal of this rejection of claims 1, 2, 5 and 6 under 35 U.S.C. §102(b) as anticipated by Inoue are respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1 and 2 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent 4,623,818 to Yamazaki in view of Inoue. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole," not just a few features of the claimed invention. Under 35 U.S.C. §103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under section 103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re

O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the Examiner must explain what the differences between the claimed invention and the prior art are and provide objective factual evidence to support a conclusion that it would be obvious to one of ordinary skill in the art to achieve the claimed invention, which includes those missing features.

In the second place, in rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These

showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Initially, Applicant respectfully submits that this rejection is improper because it violates the explicit requirement in MPEP §706.02 that prior art rejections should be confined to the best available art. In this regard, Applicant

respectfully notes that these two claims have already been rejected under 35 U.S.C. §102(b) as anticipated by Inoue.

The Office Action indicates that Yamazaki discloses the claimed ratio recited in claim 1, but does not disclose that its CRT outer surface panel is substantially plane.

In an attempt to remedy this admitted deficiency, the Office Action turns to Inoue, col. 7, lines 4-12, which discloses a CRT in which the outer surface of the panel is flattened to a high degree.

The Office Action alleges that it would be obvious in view of Inoue to modify Yamazaki to provide a substantially flat outer surface on Yamazaki's CRT front panel in view of the aforementioned disclosure of Inoue.

Applicant respectfully disagrees with this conclusion for a number of reasons.

Firstly, the Office Action has not demonstrated why one of ordinary skill would want to modify a circa 1984-1986 non-flat panel CRT in view of a circa 1993-1995 flat panel CRT without also changing the inner radius of curvatures according to the circa 1993-1995 disclosure. In other words, the Office Action does not make out a *prima facie* case of proper motivation to just modify the outer CRT front panel shape of Yamazaki's circa 1984-1986 CRT without modifying the inner radii of curvature of Yamazaki, as well, in view of Inoue, which is directed to improving CRT performance based primarily on the inner

surface radii of curvature. Applicant respectfully submits that one of ordinary skill in the art would have no incentive to take such a step backward in the art as to redesign the exterior surface of the CRT panel while not improving the interior curvature of the CRT panel, as well.

Secondly, the Office Action does not provide objective factual evidence that it would be possible to simply make Yamazaki's faceplate substantially flat while retaining the same interior radii of curvature as disclosed by Yamazaki without adversely affecting some other CRT parameter, e.g., x-ray transmission at the center of the faceplate, light transmission over the faceplate, CRT implosion resistance, etc.

Accordingly, the Office Action has not make out a *prima facie* case of proper motivation too modify Yamazaki in view of Inoue, as suggested.

Moreover, even if it were obvious to modify Yamazaki, as suggested, the resulting ratio of R_{xe} to R_{xc} for Yamazaki would still be about 1000/1500, which is about 0.66, based on Fig. 2 of Yamazaki. Therefore, Yamazaki, as modified, would not disclose or suggest the claimed range of that ratio. In this regard, claims 1 and 2, as amended, clearly recite an upper limit of 0.5 for the ratio of R_{xe} to R_{xc} .

Accordingly, the Office Action has not make out a *prima facie* case of obviousness of the claimed invention based on Yamazaki and Inoue.

Reconsideration and withdrawal of this rejection of claims 1 and 2 under 35 U.S.C. §103(a) is respectfully requested.

Claims 3, 5, 10 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Inoue in view of Opresko et al. ("Opresko"). This rejection is respectfully traversed.

A complete discussions of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

This rejection is moot with respect to claim 10, which has been canceled.

As noted above, Inoue does not anticipate claim 1, from which claims 3, 5, 9 and 12 depend. Nor is Opresko applied to remedy the aforementioned deficiencies in Inoue with respect to the subject matter recited in claim 1.

Accordingly, even if it were obvious to modify Inoue in view of Opresko to provide a shadow mask made of the recited material(s), the modified version of Inoue would still neither disclose nor suggest the claimed invention.

Accordingly, the Office Action has not made out a *prima facie* case of obviousness of the claimed invention.

Reconsideration and withdrawal of this rejection of claims 3, 5, 9, 10 and 12 under 35 U.S.C. §103(a) are respectfully requested.

Allowable Subject Matter

The Examiner states that claims 4, 7, 8, 11 and 13-17 would be allowable if rewritten in independent form.

Applicant thanks the Examiner for the early indication of allowable subject matter in this application. Objected-to claims 4, 7, 8, 11 and 13-17 have been re-written in independent form, and should therefore be allowed.

Additional Cited References

Because the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8076, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of one (1) months to February 4, 2006 in which to file a reply to the Office Action. The required fee of \$120.00 is enclosed herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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SLL/RJW:bsh/gf

Attachment: Abstract of the Disclosure